13 Apr

Bob

This is the final draft of the 16-17 April program. We will commence printing this afternoon. Looking forward to seeing you Saturday morning

John Grimes

SASA

SECURITY AFFAIRS SUPPORT ASSOCIATION

THE
SPRING '88 SYMPOSIUM

TECHNOLOGY SHORTFALLS

IN

INTELLIGENCE ARCHITECTURES

CENTRAL INTELLIGENCE AGENCY
UNITED STATES OF AMERICA

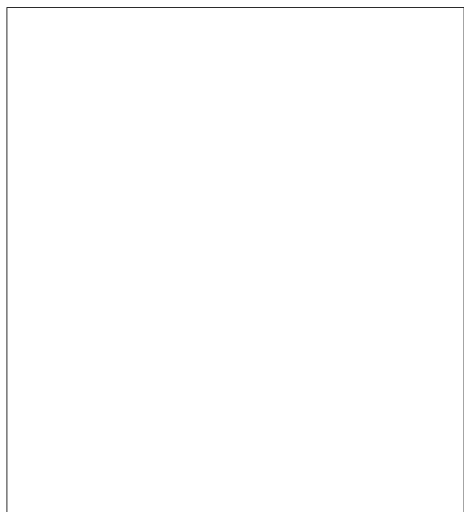HOST   SECURITY SPONSOR

THE
CENTRAL INTELLIGENCE AGENCY
LANGLEY, VIRGINIA

16-17 APRIL 1988

SASA

We Gratefully Acknowledge
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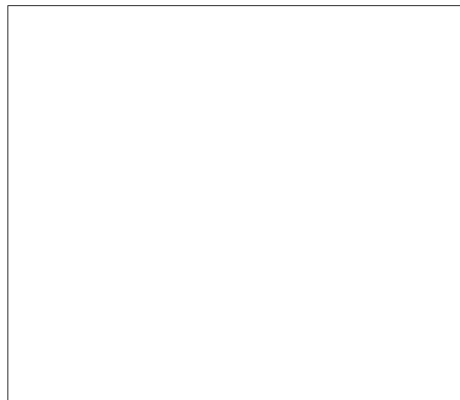
Central Intelligence Agency

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Mr. R. Evans Hineman

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Ms. Judy Stevens

Marriott Corporation

THE SECURITY AFFAIRS SUPPORT ASSOCIATION

16 April 1988

WELCOME!

We are delighted that you could join us for the Spring '88 Symposium "Technology Shortfalls in Intelligence Architectures". That there is high interest in this theme is clearly confirmed by the number of attendees.

As we all can expect, in the coming decade there will be changes of varying magnitudes on the world scene--political, technological, sociological and economic. Some will undoubtedly present us with new and formidable challenges. Albeit many of the changes may now at best be but dimly perceived, prudence demands that we do what we can to factor their dimensions and character in order that we might be better prepared to concentrate our inventive talents and resources where needed the most.

The acquisition of new and/or improved capabilities to support the U.S. intelligence endeavor in the mid and late '90's, may require lead times of five years or more. It is essential, therefore, that we seek now to gain some understanding of where and to what ends our intelligence related research and development efforts should be directed. The objective of the Spring '88 Program is to contribute to that understanding. To assist us in attaining that objective, we are indeed fortunate to have participating in our program, an enormously knowledgeable and talented group of professionals from government and industry. To them we are most grateful.

We are also deeply indebted to the Central Intelligence Agency, the host and security sponsor for this event.

John N. McMahon
President

THE SECURITY AFFAIRS SUPPORT ASSOCIATION

SPRING '88 SYMPOSIUM
We are pleased to note the attendance of individuals
from the following organizations. . .

AAI Corporation
Aegis Research Corporation
Aery systems
American Systems Corporation
Ampex Corporation
Analytics, Inc.
Andrew Corporation
Argo systems, Inc.
Autometric
Ball Aerospace Systems Group
BBN Communications Corporation
BDM International, Inc.
BETAC Corporation
Boeing Aerospace Company
Booz, Allen & Hamilton, Inc.
BTG, Inc.
California Microwave, Inc.
Central Intelligence Agency
COMPUDYNE Corporation
Computer Sciences Corporation
CONTEL Federal Systems, Inc.
Control Data Corporation
Corporation for Open Systems
Cray Research, Inc.
Dalmo Victor/Singer
Datatape, Incorporated
DBA Systems, Inc.
Defense Advanced Research Projects Agency
Defense Security Institute
DGM&S, Inc.
Digital Equipment Corporation
E-Systems, Inc.
Eastman Kodak Company
Eaton Corporation
Electronic Warfare Systems Group/Litton
Electrospace Systems, Inc.
ESL, Inc.
Fairchild Communications & Electronics Company
Ford Aerospace and Communications Corporation
General Dynamics Electronics Division
General Electric Company
Gould, Inc. Computer Systems Division
GTE Government Systems Corporation
Harris Corporation
HRB-Singer, Inc.
Hughes Aircraft Company
IBM Corporation
Intelligence Community Staff
Interac Resource, Inc.
Intergraph Corporation
ITT Defense Communications Division
Litton Itek Optical Systems
Lockheed California Company
Lockheed Electronics Company
Lockheed Missiles and Space Company, Inc.

Logicon, Inc.
Loral Defense Systems
Loral Electronic Systems
Loral Systems Group
Martin Marietta Space Systems Company
Maxim Technologies, Inc.
McDonnell Douglas Astronautics Company
McDonnell Douglas-Inco, Inc.
Mirage Systems
MK-Ferguson Company
Motorola Incorporated
MRJ, Inc.
MSI
National Security Agency
National Security Council
Naval Intelligence Command
Northrop Corporation
Office of the Deputy Under Secretary of Defense (P)
Office of the Joint Chiefs of Staff
Office of the Under Secretary of the Air Force
ORI/Intercon Systems Corporation
Pacific-Sierra Research Corporation
PAR Technology
Perkin Elmer Corporation
Physical Dynamics
PRC Government Information Systems
Processing Research, Inc.
PSC/Gould, Inc.
Quality Systems, Inc.
Quest Research Corporation
RCA
ROLM MIL-SPEC Computers
Sanders Associates, Inc.
Science Applications International Corporation
Scientific Communications, Inc.
Space Applications Corporation
Strategic Planning & Development, Inc.
System Engineering Development Corporation
Technology for Communications International
The Mitre Corporation
The MVM Group, Inc.
Tracor, Inc.
TRW
Ultrasystems Defense and Space, Inc.
Unisys Defense Systems
United Technologies Corporation
United Technologies Norden Systems, Inc.
United States Special Operations Command
Venable, Baetjer and Howard
Vitro Corporation
Wackenhut Advanced Technologies Corporation
Watkins-Johnson Company
Xerox Corporation

G R A M

SATURDAY, 16 APRIL 1988

0730 - 0900 Registration

0900 - 0905 WELCOMING REMARKS
The Honorable John N. McMahon
President, SASA

0905 - 0935 "THE INTELLIGENCE ENVIRONMENT OF THE '90's"
The Honorable Robert M. Gates
Deputy Director, Central Intelligence

0935 - 1030 "SUPPORT TO THE MILITARY COMMANDER, 1995"
Vice Admiral Jerry O. Tuttle, USN
Director for C³ Systems, OJCS

1030 - 1050 Break

1050 - 1130 "SUPPORT TO THE POLICY MAKER, 1995"
Mr. Barry Kelly
Special Assistant to the President for National Security Affairs

1130 - 1140 "PLANNING RESPONSE TO INTELLIGENCE NEEDS"
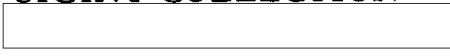**The Honorable John N. McMahon**
President, SASA

STAT 1140 - 1225 "IMAGERY COLLECTION"

Deputy Director, Office of Development & Engineering, CIA

1225 - 1340 Lunch

STAT 1340 - 1425 "SIGINT COLLECTION"

Chief, High Frequency Systems, ODDR&E, NSA

STAT 1425 - 1510 "IMPACT ON DATA PROCESSING"

Deputy Director, Telecommunications & Computer Services, NSA

1510 - 1530 Break

R   A   M

1530 - 1700	**"EMERGING TECHNOLOGIES, A FORECAST"** **Dr. Craig I. Fields** *Deputy Director for Research* *Defense Advanced Research Projects Agency*
	Dr. Stephen J. Lukaski *Vice President, Technology, Northrop Corporation* *Vice President & Manager,* *Northrop Research & Technology Center*
1700 - 1930	Reception

SUNDAY, 17 APRIL 1988

0730 - 0900	Registration
0900 - 0945	**"THE NEED FOR INTEGRATED ARCHITECTURES"** **The Honorable Donald C. Latham** *Vice President, Computer Sciences Corporation*
0945 - 1030	**"NEAR REAL TIME SYSTEMS:** **ARCHITECTURE/TECHNOLOGY"** **Mr. James V. Hirsch** *Associate Deputy Director, Science & Technology, CIA*
1030 - 1050	Break
1050 - 1130	**"DISTRIBUTED ARCHITECTURES"** *Chief, Plans & Project Development, NSA*
1130 - 1215	**"NATIONAL-TACTICAL;** **ARCHITECTURES/TECHNOLOGY"** *Associate Deputy Director, Operations (Military Support), NSA*
1215 - 1230	CLOSING REMARKS **THE HONORABLE JOHN N. MCMAHON** *President, SASA*

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Note: The overall classification of the symposium precluded the inclusion of meaningful extracts in this program.

SASA Officers and Board of Directors

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Mr. John N. McMahon, *Executive Vice President/Plans & Programs*
Lockheed Missiles, Space and Electronics Systems

Executive Vice President
Mr. John E. Morrison, Jr., *President, The MVM Group, Inc.*

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Lt. General Edward J. Heinz, USAF, *Director, Intelligence Community Staff*

Mr. Jimmie D. Hill, *Deputy Under Secretary of the Air Force,*

Mr. R. Evans Hineman, *Deputy Director, S & T, Central Intelligence Agency*

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Mr. Robert J. Kohler, *President, ESL, Inc.*

Maj. General John E. Kulpa, USAF (Ret.), *Senior Vice President, Government Systems Operations, Eaton Corporation*

Mr. Frank J. Lewis, *Senior Vice President & Sector Executive, Government Systems, Harris Corporation*

Mr. Gordon O. Moe, *Executive Vice President/Manager, Pacific Sierra Research Corporation*

Mr. Gordon E. Myers, *Vice President and General Manager, IBM Federal Systems Division*

Dr. Val P. Peline, *President, Lockheed Electronic Systems Group*

Lt. General Leonard H. Perroots, USAF, *Director, Defense Intelligence Agency*

IN THE BEGINNING. . . .

The movement to create SASA was spearheaded in the late Seventies by a young attorney, Leonard Moodispaw who had served a number of years with the National Security Agency prior to entering private law practice. While at NSA, Moodispaw's duties brought him in daily contact with representatives of industry who either provided services and/or material to the agency or who were seeking opportunities to do so. Early on Moodispaw became convinced that many of the problems in the area of classified acquisitions between government agencies and industry might be ameliorated and many perhaps eliminated by a more common understanding among the parties concerned. It was that fundamental idea that encouraged Moodispaw, assisted by a number of associates in government and industry to "lay the keel" of the Security Affairs Support Association. Some of the early assistant "architects" of SASA were Robert Welte (now Presdient, LORAL Electronic Systems), Ira Kane (now Consultant), Kent Keith (Vice President, Business Development, HARRIS) and Harry Letaw (President, Severn Communications).

SASA was chartered by the State of Maryland in April 1979. The first President of the association was Robert Singel (1980-1981). He was succeeded by Joseph Hull (1981-1983), followed by Robert Hermann (1983-1986). The first Board Chairman was Wayne Shelton (1981-1983), and the second, Robert Welte (1983-1986), the third, Vincent Cook (1986-1987).

Although its creation dates only from 1979, SASA has become an active and useful force in the Intelligence Community. Satisfying a communications need long felt in the community, issues of interest to government and industry alike have been and are being discussed in its forum. Key operational, administrative and financial issues of concern to its membership have been openly explored. One of SASA's early achievements was development of an innovative study of the opportunities to improve classified contracting. This effort contributed in a quietly effective way toward the solution of problems in that area.

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DR. ROBERT M. GATES

Dr. Gates was sworn in as Deputy Director of Central Intelligence on 18 April 1986. In this position he is principal deputy to the Director, who heads the Intelligence Community (all of the foreign intelligence agencies of the United States) and directs the Central Intelligence Agency.

Dr. Gates, a native of Kansas, received his BA Degree from the College of William and Mary in 1965, his Masters Degree in History from Indiana University in 1966, and his Doctorate in Russian and Soviet History from Georgetown University in 1974.

Dr. Gates joined the Central Intelligence Agency in 1966, serving as an intelligence analyst and as one of two Assistant National Intelligence Officers for Strategic Programs. In 1974, he was assigned to the National Security Council Staff. After more than five years at the National Security Council, serving three Presidents, Dr. Gates returned to the Central Intelligence Agency in late 1979. He subsequently was appointed to a series of administrative positions and served as National Intelligence Officer for the Soviet Union prior to his appointment as Deputy Director for Intelligence in January 1982.

As DDI for nearly four and one-half years, Dr. Gates directed the Central Intelligence Agency's component responsible for all analysis and production of finished intelligence. In September 1983, Director Casey appointed Dr. Gates Chairman of the National Intelligence Council concurrent with his position as Deputy Director for Intelligence. As Chairman of the National Intelligence Council, Dr. Gates directed the preparation of all National Intelligence Estimates prepared by the Intelligence Community.

VICE ADMIRAL JERRY O. TUTTLE, USN

Vice Admiral Jerry O. Tuttle was born in Hatfield, Indiana. He received his pilot wings and commission as an Ensign in the U.S. Naval Reserve in October 1956.

During the period 1957-1969, Admiral Tuttle's duties involved intermingled flying assignments and further formal education including attendance at the Naval Postgraduate School at Monterey where he earned a Bachelor's degree in communications engineering (1961), the Naval War College (1969) where he also earned a Master's Degree in International Affairs from George Washington University.

In 1969 he became Aide and Flag Lieutenant to CINCPACFLT, and then in 1970 became the Executive Officer for Attack Squadron 174. He was assigned as the Commanding Officer, Attack Squadron 81 in 1972, and then appointed to the Staff, Commander Naval Air Force, U.S. Atlantic Fleet in 1973, until becoming Commander, Attack Carrier Air Wing THREE in 1974. He served as Commanding Officer, USS KALAMAZOO (AOR 6) from 1975 to 1976, then Commanding Officer, USS JOHN F. KENNEDY (CV 67) until 1978. He was again assigned to the Office of CNO as Special Assistant to CNO (OP-004) until 1979, and following a two-year tour at the Defense Intelligence Agency as the Assistant Vice Director for Plans and Policy, returned to the Office of CNO as the Naval Inspector General (OP-008) until 1985 when he became Deputy and Chief of Staff, CINCLANTFLT.

He assumed his present position as Director of the Command, Control and Communications Directorate (J-6), Organization of the Joint Chiefs of Staff, in May 1987.

move up even with Dr. Gates

MR. D. BARRY KELLY

Mr. Kelly was appointed Special Assistant to the President for National Security Affairs and Senior Director of Intelligence Programs on the NSC Staff in January 1987. Most of his career has been with the U.S. Government. He has served in Nepal, Vietnam, and the Soviet Union. In 1975, he was selected to be the National Intelligence Officer for Special Activities where he coordinated select Intelligence Community collection and analysis resources. In 1978, he was appointed director of an office in the Central Intelligence Agency Directorate for Science and Technology. While at the CIA, Mr. Kelly received the Intelligence Medal of Merit, the Distinguished Intelligence Medal, and in 1980 the first CIA Distinguished Intelligence Officer Award.

Subsequent to his retirement from the CIA in 1980 after 20 years of service, Mr. Kelly worked in private industry where he concentrated on issues affecting national security. He left his position as an Operations Manager at Titan Systems, Inc., to accept the appointment at the NSC.

Mr. Kelly holds a BA degree (Magna Cum Laude) from the University of Pittsburgh (1959) and an MA degree from Duke University (James B. Duke Fellow) (1960).

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B I O G R A P H I E S

DR. CRAIG I. FIELDS

Dr. Fields received his B.S. degree from the Massachusetts Institute of Technology and his Ph.D. from the Rockefeller University. After serving on the Faculty of Harvard University, he joined the Defense Advanced Research Projects Agency (DARPA) in 1974.

While at DARPA, Dr. Fields has been responsbile for managing and transferring research programs, primarily in the area of advanced computer technology. He is currently the Deputy Director for Research at DARPA.

He has played a key role in the planning, and both the technical and financial management of the Strategic Computing Program, the national effort to develop a new generation of machine intelligence technology, including fifth generation multiprocessor supercomputers, artificial intelligence, and microelectronics.

DR. STEPHEN JOSEPH LUKASIK

EDUCATION:
B.S. Physics Rensselaer Polytechnic Institute 1951
M.S. Physics Massachusetts Institute of Technology
1953
Ph.D. Physics Massachusetts Institute of Technoloy
1956

PROFESSIONAL POSITIONS:
Northrop Corporation   Corporate Vice President-Technology
Vice President and Manager,
Northrop Research and Technology Center
Federal Communications Commission   *Chief Scientist*
Rand Corporation   *Senior Vice President for National Security Programs   Chief Scientist*
Xerox Corporation   *Vice President and Manager, Systems Development Division*
Department of Defense, Advanced Research Projects Agency   *Director,*
Deputy Director, Director for Nuclear Test Detection
Stevens Institute of Technology   *Chief, Fluid Physics Division, Davidson Laboratory*
Associate Research Professor of Physics
Westinghouse Electric Corporation   *Scientist, Bettis Nuclear Laboratory*

CURRENT PROFESSIONAL ACTIVITIES:
Director for Central Intelligence: Science and Technology Advisory Panel; Joint Strategic Targeting Planning Staff: Scientific Advisory Group; Defense Science Board: Airbourne Reconnaissance Task Force; Office of the Secretary of Defense: Survivability Working Group; Commission on Integrated Long Term Strategy; Technology Working Group; National Research Council: Committee on the International Exchange and Movement of Engineers; Software Productivity Consortium: Board of Directors; Stevens Institute of Technology: Board of Trustees; Harvey Mudd College: Board of Trustees; University of California, Berkeley: Engineering Advisory Council; University of Southern California: Engineering Board of Councilors; National Security Industrial Association: Board of Trustees; The Information Society-An International Journal: Associate Editor

THE HONORABLE DONALD C. LATHAM

Prior to his current position as Vice President, Systems Group, Computer Sciences Corporation, Mr. Latham served as the Assistant Secretary of Defense C³I from August 1984 until July 1987. Previously he had served as the Deputy Under Secretary of Defense C³I from July 1981. Prior to his Pentagon assignments, he was Division Vice President, Engineering, RCA Government Systems Division, since December 1978. In that capacity, Mr. Latham was responsible for coordinating and reviewing the engineering activities of the Division's four business units: Astro-Electronics, Automated Systems, Government Communications Systems, and Missile and Surface Radar.

He was also directly responsible for the Division's Advanced Technology Laboratories in Camden, New Jersey. Before joining RCA, Mr. Latham was Director, Research and Engineering, for Martin Marietta Aerospace, Orlando, Florida.

Starting as a member of the technical staff at Martin Marietta Aerospace in Baltimore in 1963, Mr Latham was transferred to the Company's Orlando Division in 1965 and promoted to Manager, Advanced Programs. In 1968, he became Manager, Air and Ballistic Missile Defense Systems at the Orlando Facility.

In 1971, he left Martin Marietta to become Chief-Engineering Staff, of the NSA European Headquarters. In 1974, NSA appointed Mr. Latham as Deputy Chief, Office of Microwave Space and Mobile Systems. In January 1977, he accepted the Research and Engineering directorship at Martin Marietta.

As an Air Force officer, Mr. Latham was assigned to research and development activities at NSA from 1957 to 1959.

Mr. Latham holds a B.S. Degree in Electrical Engineering from The Citadel (1955). He was awarded an M.S. Degree in Electrical Engineering and an advanced Electrical Engineering Degree from the University of Arizona in 1957 and 1965, respectively.

Mr. Latham has written two books and has authored a large number of technical papers. He has contributed to numerous business and Department of Defense engineering studies, reports and proposals.

MR. JAMES V. HIRSCH

Mr. Hirsch, was born in Mt. Carmel, Pennsylvania. He graduated from Villanova University with a B.S. degree in Electrical Engineering. He obtained his Masters from MIT in 1959.

Mr. Hirsch was employed by Mitre Corporation for eight years and with General Electric Corporation for a year and a half before joining CIA in June 1968. He directed research and development and operations in OEL, ORD and OSO in the Directorate of Science and Technology, and collection evaluation in the Intelligence Community Staff.

In 1978, Mr. Hirsch left the CIA to work for Betac Corporation as manager of a strategic systems business area. In April 1981, he formed Pathway Systems, Inc., an engineering/consulting firm.

Mr. Hirsch was appointed as the Associate Deputy Director for Science and Technology effective 2 May 1983.
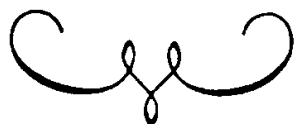
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In 1984, SASA inaugurated its award program when the DCI presented the SASA Medal of Achievement to Dr. William Oliver Baker "for his enduring contributions to National Security and Freedom". The medal is now designated the William Oliver Baker Award and is presented annually to an individual from government, industry or academe who has performed distinguished service in support of the national intelligence endeavor. Senator Barry Goldwater received the award in 1985 and Ambassador Vernon Walters in 1986 and Ambassador Richard Helms in 1987.

SASA continues to pursue its objective of "enhancing relationships and understanding" among all who support the national intelligence endeavor, through a series of symposia on topics of high current interest. Themes addressed in recent months include TACTICAL INTELLIGENCE and RELATED ACTIVITIES (TIARA-**SOFTWARE TRENDS in the INTELLIGENCE COMMUNITY**INTELLIGENCE SUPPORT to NATO**IN-FOXSEC FOR THE NINETIES**SECURITY TRENDS and IMPACTS**TECHNOLOGY SECURITY and MANAGING CHANGE.

In January, ~~this year~~ 1987, SASA implemented its Security Support Program. Under this program, SASA is now prepared to receive from its members, on a non-attribution basis, generic ~~genic~~ unclassified industrial security issues and problems for appropriate action. The program is fully described in the January 1987 issue of the SASA newsletter.

SASA is a non-profit professional association operated by its members through an elected Board of Directors who manage its affairs and programs in accordance with its By-Laws. The activities of the association and other topics of interest are reported in its newsletter-COLLOQUY.

Security Affairs Support Association

SASA is headquartered in downtown Annapolis, Maryland.
Requests for additional information by telephone or mail are welcomed.

Security Affairs Support Association
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Annapolis, Maryland 21401
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